

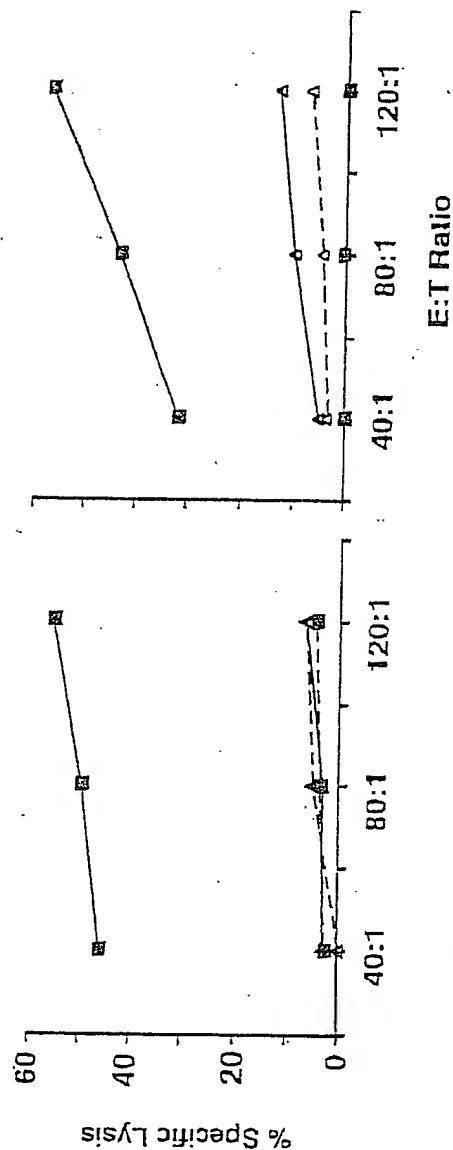
10970450

Figure 1A

C57BL/6 (Wild Type)

Figure 1B

CD4^{-/-}



β2m^{-/-}

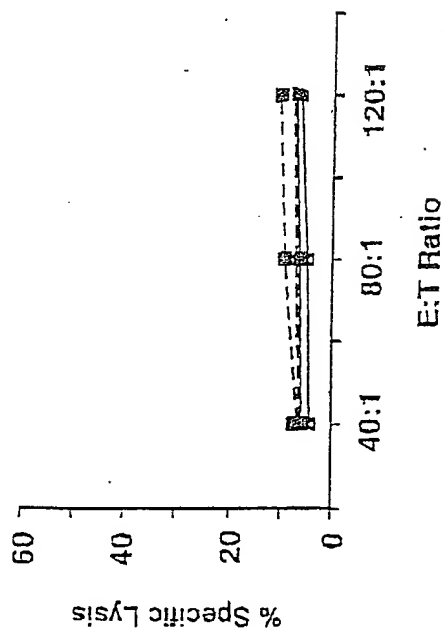


Figure 1C

Effector Cells elicited with:

■ OVA.TBhsp70

△ OVA

Target Cells:

--- T2-K^b

— T2-K^b+SINFEKL peptide (e.g., 1×10^{-7} M)

Figure 2A

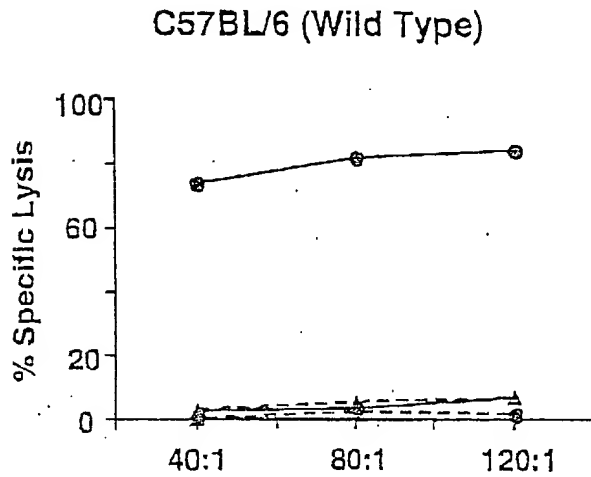
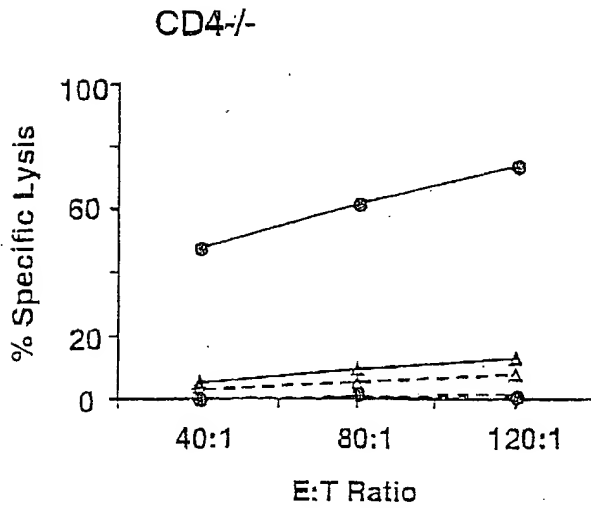


Figure 2B



Effector Cells

elicited with:
 ● OVA.mhsp70

△ OVA

Target Cells:

--- T2-K^b

— T2-K^b+SIINFEKL

Hsp70 Domains

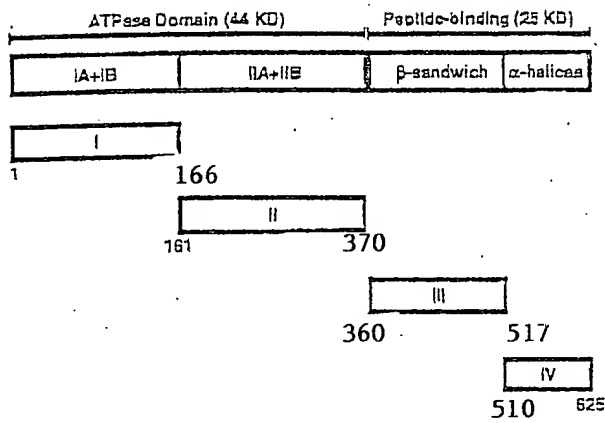


Figure 3

C57BL/6

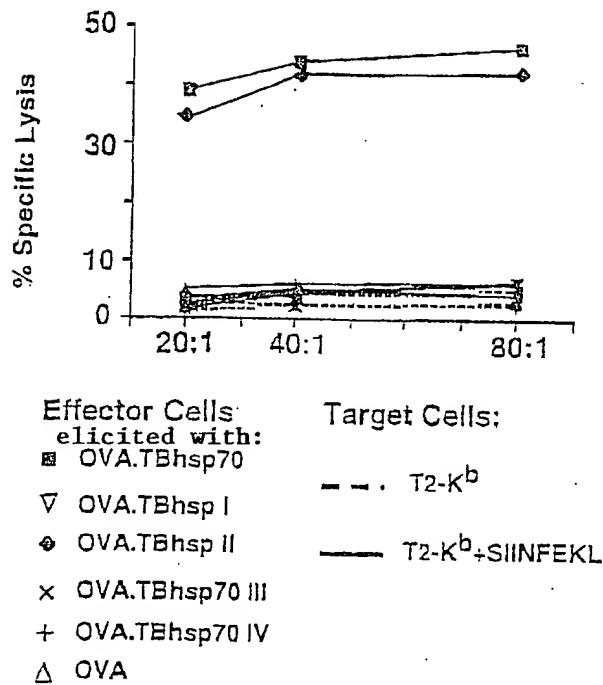


Figure 4

IKVSGLEQLSIYRYYGILLKEAY
 Ova ↑ ↑ αKG

Figure 5A

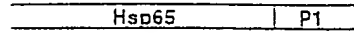


Figure 5B

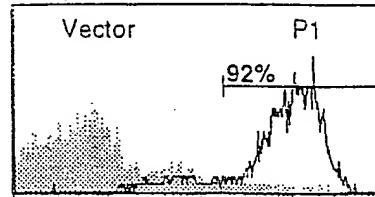


Figure 5C

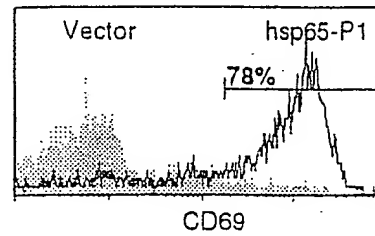
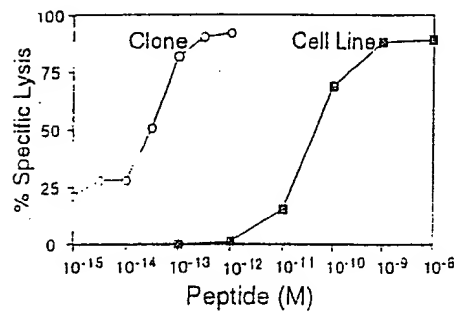


Figure 5D



FOOTFO"4EETFO60

Figure 6A

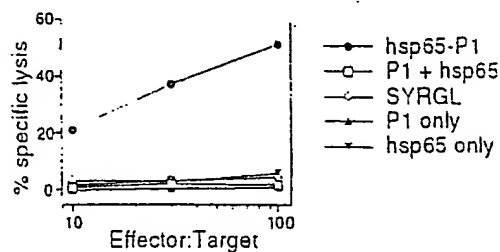


Figure 6B

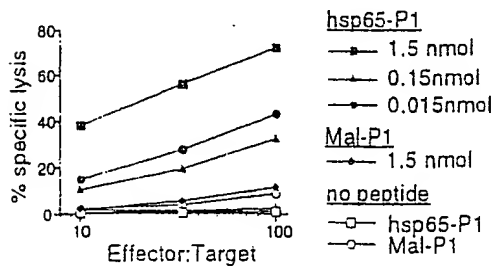
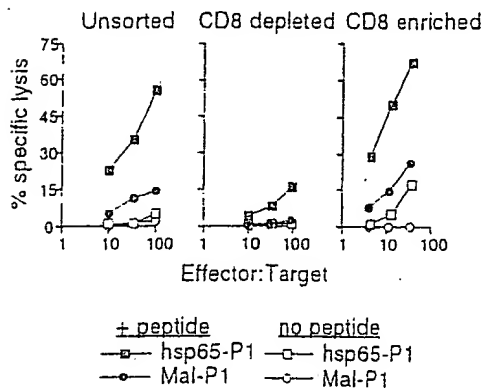


Figure 6C



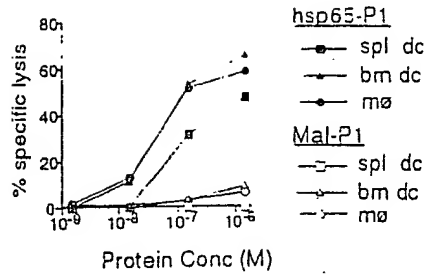


Figure 7

0399.2006-003

Figure 8A

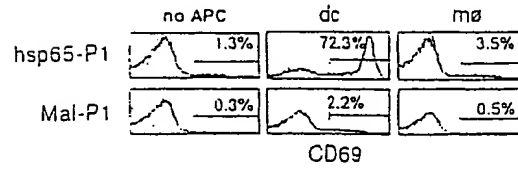


Figure 8B

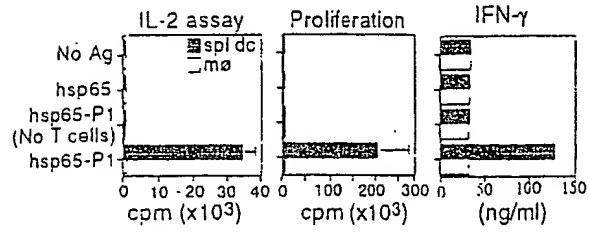
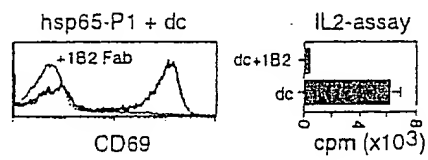


Figure 8C



09761534-041604

Figure 9A

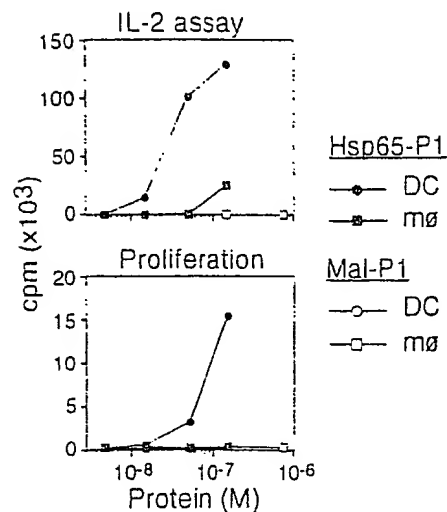


Figure 9B

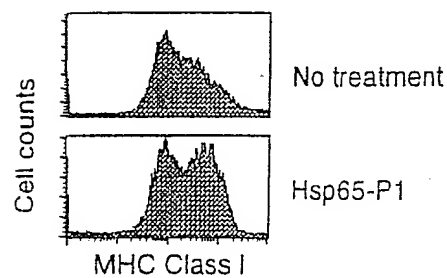
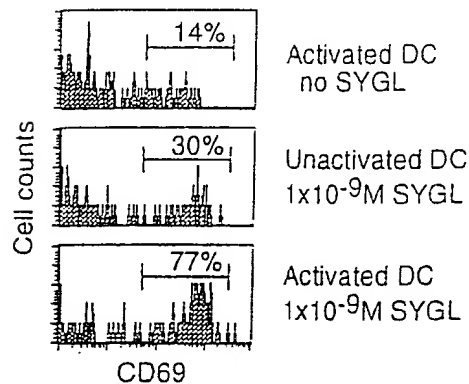


Figure 9C



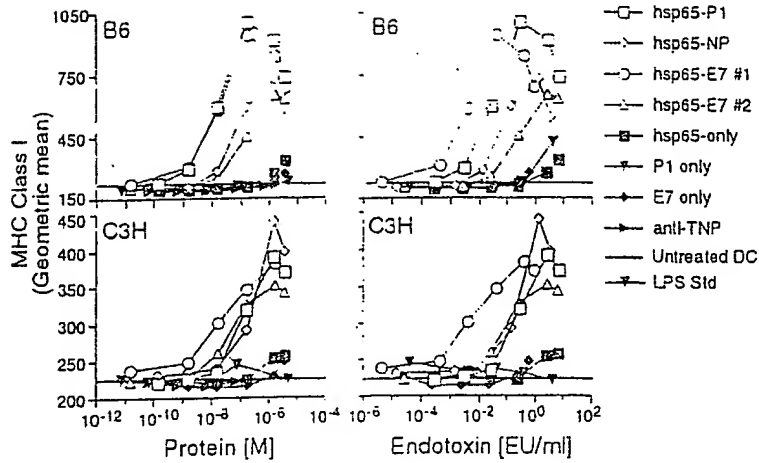


Figure 10A

Figure 10B

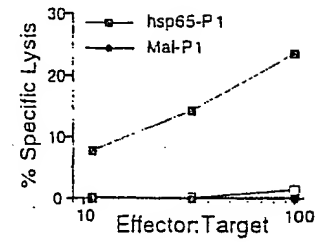


Figure 10C

2007-09-10 10:00:00

TBhsp70 (cDNA) -> Translate • 1-frame

DNA sequence 1879 bp ATGGCTCCTCCG ... AGGCCAAGTGAC linear

1/1 31/11
 ATG GCT CCG GCG GTC GCG ATC GAC CTC GCG ACC ACC AAC TCC GTC GTC TCG OTT CTG GAA
 M A R A V G I D L G T T N S V V S V L E
 51/21 91/31
 GGT GCG GAC CCG GTC CTC CTC CCG AAC TCC GAG GCG TCC AGC ACC ACC CCG TCA ATT GTC
 G G D P V V V A N S E G S R T T P S I V
 121/41 151/51
 CCC TTC CCC CCC AAC CCG GAG GTC CTC GCG CAG CCG GCG AAC AAC CAG GCA GTG ACC
 A F A R N G E V L V G Q P A K N Q A V T
 181/61 211/71
 AAC GTC GAT CCG ACC GTG CCG TCG GTC AAC CGA CAC ATG GCG ACC GAC TCG TCC ATA GAG
 N V D R T V R S V K R H M C S D W S I E
 241/81 271/91
 ATT GAC GCG AAG AAA TAC ACC GCG CCG GAG ATC ACC GCG CCG ATT CTG ATG AAG CTG AAG
 I D C K K Y T A P E I E A R I L M K L K
 301/101 331/111
 CCG GAC GCG GAG GCG TAC CTC GGT GAG GAC ATT ACC GAG CCG GTT ATC ACG ACG CCC GCG
 R D A E A Y L G E D I T D A V I T T P A
 361/121 391/131
 TAC TTC AAT GAC GCC CAG CCG CAG GCG ACC AAG GAC GCG GCG CAG ATC GCG GCG CTC AAC
 Y P N D A Q R Q A T K D A C Q I A G L N
 421/141 451/151
 GTG CTG CCG ATC GTC AAC GAG CCG ACC GCG GCG GCG CTC GCG TAC GCG CTC GAC AAG GCG
 V L R I V N E P T A A A L A Y G L D K G
 481/161 511/171
 GAG AAG GAG CAG CGA ATC CTG GTC TTC GAC TTG GGT GGT GCG ACT TTC GAC GGT TCC CTG
 E K E Q R I L V F D L O G G T F D V S L
 541/181 571/191
 CTG GAG ATC GCG GAG GGT GTG GTT GAG GTC CGT GCG ACT TCG CCG GAC AAC CAC CTC GCG
 L E I G E G V V E V R A T S G D N H L G
 601/201 631/211
 GCG GAC GAC TCG GAC CAG CCG GTC GTC GAT TCG CTG GTG GAC AAG TTC AAG GCG ACC AAG
 G D D W D Q R V V D W L V D K F N G T S
 661/221 691/231
 GCG ATC GAT CTG ACC AAG GAC AAG ATG CCG ATG CAG CCG CTG CCG GAA CCC GCG GAG AAG
 G I D L T K D K M A M Q R L R E A A E N
 721/241 751/251
 GCA AAG ATC GAG CTG AGT TCG AGT CAG TCC ACC TCG ATC AAC CTG CCC TAC ATC ACC GTC
 A K I E L S S S Q S T S I N L F Y I T V
 781/261 811/271
 GAC GCG GAC AAG AAC CCG TTG TTC TTA GAC GAG CAG CTG ACC CCG CCG GAG TTC CAA CCG
 D A D K N P L F L D E Q L T R A E F Q R
 841/281 871/291
 ATC ACT CAG GAC CTG CTG GAC CCG ACT CCG AAG CCG TTC CAG TCG GTG ACC GGT GAC ACC
 I T Q D L L D R T R R P F Q S V I A D T
 901/301 931/311
 GCG ATC TCG GTG TCG GAG ATC GAT CAC GGT GTG CTC GTG GGT GGT TCG ACC CCG ATG CCG
 G I S V S E I D H V V L V G G S T R M P
 961/321 991/331
 GCG GTG ACC GAT CTG GTC AAG GAA CTC ACC GCG GCG AAG GAA CCC AAC AAG GCG CTC AAC
 A V T D L V K E L T G G N E P N R G V N
 1021/341 1051/351
 CCC GAT GAG GTC GTC GCG GTC GGA GCG GCT CTG CAG GCG GCG GTC CTC AAG GCG GAG CTG
 P D E V V A V G A A L Q A G V L K G E V
 1081/361 1111/371
 AAG GAC GTT CTG CTG CTT GAT GTT ACC CCG CTG ACC CTG GGT ATC GAG ACC AAG GCG GCG
 K D V L L L D V T P L S L G I E T K G G
 1141/381 1171/391
 GTG ATG ACC ACG CTC ATC GAG CCG AAC ACC ACG ATC CCC ACC AAG CCG TCG GAG ACT TTC
 V M T R L I E R N T T I P T R S S E T F
 1201/401 1231/411
 ACC ACC GCG GAC GAC AAC GAA CCG TCG GTG CAC ATC CAG GTC TAT CAG GCG GAG CCG GAG
 T T A D D N Q R S V Q I Q V Y Q G E R E

039761534-011601

Figure 11

TBhsp70 (cDNA) -> Translate • 1-frame

DNA sequence 1879 bp ATGGCTCGTCCG ... AGGCCAAGTGAC linear

481/151	511/171
GAG AAG GAG CAG CGA ATC CTG GTC TTC GAC TTG GGT GGT GGC ACT TTC GAC GTT TCC CTG	
E K E Q R I L V P D L C G G T F D V S L	
541/181	571/191
CTG GAG ATC GGC GAG GGT GTG GTT GAG GTC CGT GCG ACT TCG CCG GAC AAC CAC CTC GGC	
L E I G E G V V E V R A T S G D N H L G	
601/201	611/211
GGC GAC GAC TGG GAC CAG CCG CTC GTC GAT TGG CTG GTG GAC AAG TTC AAG GGC ACC ACC	
G D D W D Q R V V D W L V D K F K G T S	
651/221	691/231
GGC ATC GAT CTG ACC AAG GAC AAG ATG GCG ATG CAG CCG CTC CCG GAA CCC GCC GAG AAG	
S I D L T K D R M A M Q R L R E A A E K	
721/241	751/251
GCA AAG ATC GAG CTG AGT TCG AGT CAG TCC ACC TCG ATC AAC CTG CCC TAC ATC ACC GTC	
A K I E L S S S Q S T S I N L P Y I T V	
781/261	811/271
GAC GCC GAC AAG AAC CCG TTG TTC TTA GAC GAG CAG CTG ACC CCG CCG GAG TTC CAA CCG	
D A D K N P L F L D E Q L T R A E F Q R	
841/281	871/291
ATC ACT CAG GAC CTG CTG GAC CCG ACT CCG AAG CCG TTC CAG TCG GTG ATC CCG GAC ACC	
I T Q D L L D R T R K P F Q S V I A D T	
901/301	931/311
GGC ATT TCG GTG TCG GAG ATC GAT CAC GTT GTG CTC GTG GGT GGT TCG ACC CCG ATG CCC	
G I S V S E I D H V Y L V G G S T R M P	
961/321	991/331
GGC GTG ACC GAT CTG GTC AAG GAA CTC ACC GGC GGC AAG GAA CCC AAC AAG GGC GTC AAC	
A V T D L V K E L T G G K E P N K G V N	
1021/341	1051/351
CCC GAT GAG GTT GTC GCG GTG GGA GCG GCT CTG CAG GCG GCG CTC CTC AAG GGC GAG GTC	
P D E V V A V G A A L Q A G V L K G S V	
1081/361	1111/371
AAG GAC GTT CTG CTG CTT GAT GTT ACC CCG	
K D V L L L D V T P	

Figure 12

0399.2006-003

murine hsp70.1 -> Translate • 1-frame

DNA sequence 1929 bp ATGGCCAGAAC ... GAGGTGATTAG linear

1/1
 ATG GCC AAG AAC ACG GCG ATC GGC ATC GAC CTG GGC ACC ACC TAC TCG TCG GTG GGC GTG
 M A K N T A I G I D L G T T Y S C V G V
 31/11
 61/21
 TTC CAG CAC GGC AAG GTG GAG ATC ATC GCC AAC GAC CAG GGC AAC CGC ACG ACC CCC AGC
 F Q H G K V E I I A N D Q G N R T T P S
 91/31
 121/41
 TAC GTG GCC TTC ACC GAC ACC GAG CGC CTC ATC GGC GAC GGC GCC AAG AAC CAG GTG GGC
 Y V A F T D T E R L I G D A A K N Q V A
 151/51
 181/61
 CTG AAC CCG CAG AAC ACC GTG TTC GAC GGC AAG CGG CTG ATC GGC CGC AAG TTC GGC GAT
 L N P Q N T V F D A K R L I G R K F G D
 211/71
 241/81
 GCG GTG GTG CAG TCC GAC ATG AAG CAC TGG CCC TTC CAG GTG GTG AAC GAC GGC GAC AAG
 A V V Q S D M K H W P F Q V V N D G D K
 271/91
 301/101
 CCC AAG GTG CAG GTG AAC TAC AAG GGC GAG AGC CGG TCG TTC TTC CCG GAC GAG ATC TCG
 P K V Q V N Y K G E S R S F P P E E I S
 331/111
 361/121
 TCC ATG GTG CTG ACG AAG ATG AAG GAG ATC GCT GAG GCG TAC CTG GGC CAC CCG GTG ACC
 S M V L T K M K E I A E A Y L G H P V T
 391/131
 421/141
 AAC GCG GTG ATC ACG GTG CCC GGC TAC TTC AAC CAC TCT CAG CCG CAG GGC ACC AAG GAC
 N A V I T V P A Y F N D S Q R Q A T K D
 451/151
 481/161
 GCG GGC GTG ATC GCC GGT CTA AAC GTG CTG CCG ATC ATC AAC GAG CCC ACG GCG GGC GGC
 A G V I A G L N V L R I E N E P T A A A
 511/171
 541/181
 ATC GCC TAC CCG CTG CAC CCG ACC GGC AAG GCG GCG AAC GTG CTC ATC TTC GAC CTG
 I A Y G L D R T G K G E R N V L I F D L
 571/191
 601/201
 GCG GCG GCG ACG TTC GAC GTG TCC ATC CTG ACG ATC GAC CAC GGC ATC TTC CAG GTG AAG
 G G G T F D V S I L T I D D G I F E V K
 631/211
 661/221
 GCC ACG GCG GCG GAC ACG CAC CTG GGA GCG GAG GAC TTC CAC AAC CCG CTG GTG ACC CAC
 A T A G D T H L G G E D F D N R L V S H
 691/231
 721/241
 TTC GTG GAG GAG TTC AAG ACG AAG CAC AAG AAG GAC ATC AGC CAG AAC AAG CCG GCG GTG
 F V E E F K R K H K K D I S Q N R R A V
 751/251
 781/261
 CCG CCG CTG CCG ACG GCG TGT GAG ACG GCG AAG ACG ACG CTG TCG TCC AGC ACC CAG GCG
 R R L R T A C E R A K R T L S S S T Q A
 811/271
 841/281
 ACC CTG GAG ATC GAC TCT CTG TTC GAG GGC ATC GAC TTC TAC ACA TCC ATC ACG CCG GCG
 S L E I D S L F E G I D F Y T S I T R A
 871/291
 901/301
 CCG TTC GAA GAG CTG TCC TCG CAC CTC TTC CCG CCG ACG CTG CAG CCC CTC GAG AAG GCC
 R F E E L C S D L F R G T L E P V E K A
 931/311
 961/321
 CTG CCG GAC GCG AAG ATG GAC AAG GCG CAG ATC CAC GAC CTG GTG CTG GTG GGC GGC TCG
 L R D A K M D K A Q I H D L V L V G G S
 991/331
 1021/341
 ACC CCG ATC CCC AAG GTG CAG AAG CTC CTG CAG GAC TTC TTC AAC GGC CCG GAC CTG AAG
 T R I P K V Q K L L Q D F F N G R D L N
 1051/351
 1081/361
 AAG ACC ATC AAC CCG GAC GAG GCG GTG GCC TAC CCG GCG GCG GTG CAG GCG GCC ATC CTG
 K S I N P D E A V A Y G A A V Q A A I L
 1111/371
 1141/381
 ATG CCG GAC AAG TCG GAG AAC GTG CAG GAC CTG CTG CTG CTG GAC GTG GCG GCG CTG TCG
 M G D K S E N V Q D L L L L D V A P E S
 1171/391
 1201/401
 CTG GCG GAG ACT GCG GCG GCG GTG ATG ACG GCG CTC ATC AAG CCG AAC TCG ACC ATC
 L G L E T A G G V N T A L I K R N S T I
 1231/411
 1261/421
 CCC ACC AAG CAG ACG CAG ACC TTC ACC ACC TAC TCG GAC AAC CAG GCG CCG CTG CTG ATC
 P T K Q T Q T F T T Y S D N Q P G V L I

Figure 13A

murine nsp/9.1 -> Translate • 1-frame

1321/441
 CAG GTG TAC GAG GGC GAC AGG GCC ATG ACG CGC GAC AAC AAC CTG CTG CCG CGC TTC GAG
 Q V Y E G E R A M T R D N N L L G R F E

1351/451
 1411/471
 1381/461
 CTG AGC GGC ATC CCG CCG GCG CCC AGG GGC CTC CCG CAG ATC GAG GTG ACC TTC GAC ATC
 L S G I P P A P R G V P Q I E V T F D I

1441/481
 GAC GCC AAC GGC ATC CTG AAC GTC ACG GCC ACC GAC AAG AGC ACC GGC AAG GCC AAC AAG
 D A N G I L N V T A T D K S T G K A N K

1471/491
 1501/501
 ATC ACC ATC ACC AAC GAC AAG GGC CCG CTG AGC AAG GAG GAG ATC GAG CGC ATG GTG CAG
 I T I T N D K G R L S K E E I E R M V Q

1531/511
 1561/521
 GAG GCC GAG CGC TAC AAG GCC GAG GAC GAG GTG CAG CGC GAC AGG GTG GCC GCC AAG AAC
 E A E R Y K A E D E V Q R D R V A A K N

1591/531
 1621/541
 GCG CTC GAG TCC TAT GCC TTC AAC ATG AAG AGC GCC GTG GAG GAC GAG GGT CTC AAG GCC
 A L E S Y A F N M K S A V E D E G L K G

1651/551
 1681/561
 AAG CTC AGC GAG GCT GAC AAG AAG AAG GTC CTG GAC AAG TGC CAG GAG GTC ATC TCC TGG
 K L S E A D K K K V L D K C Q E V I S W

1711/571
 1741/581
 CTG GAC TCC AAC ACG CTG GCC GAC AAG GAG GAG TIC GTG CAC AAG CCG GAG GAG CTG GAG
 L D S N T L A D K E E F V H K R E E L E

1771/591
 1801/601
 CCG GTG TGC AGC CCC ATC ATC AGT GGG CTG TAC CAG GGT GCG GGT GCT CCT GGG GCT GGG
 R V C S P I I S G L Y Q G A G A P G A G

1831/611
 1861/621
 GCC TTC GGG CCC CAG GCG CCG CCG AAA GGA GCC TCT GGC TCA GGA CCC ACC ATC GAG GAG
 G F G A Q A P P K G A S G S G P T I E E

1891/631
 1921/641
 GTG GAT TAG
 V D

Figure 13B

murine hsp70.1 -> Translate • 1-frame

DNA sequence 1929 bp ATGGCCAGAAC ... GAGGTGGATTAG linear

09764534.014604
 TCGTTCGZ60

601/201	571/191
GGG GGC GGC ACC TTC GAC GTG TCC ATC CTG	AAG GGC GAG CGC AAC GTG CTC ATC TTC GAC CTG
G G G T F D V S I L T I D D G I F E V K	K G E R N V L I F D L
661/221	631/211
GGC ACC GCG GGC GAC ACC CAC CTG GGA GGG GAG GAC TTC GAC AAC CCG CTG GTG ACC CAC	
A T A G D T H L G G E D F D N R L V S H	
721/241	691/231
TTC GTG GAG GAG TTC AAG AGG AAG CAC AAG AAG GAC ATC ACC CAG AAC AAG CGC GCG GTG	
F V E E F K R K H K K D I S Q N K R A V	
781/261	751/251
CGG GGC CTG CGC ACC GCG TGT GAG ACC GCC AAG ACC ACC CTG TCG TCC ACC ACC CAG GCC	
R R L R T A C E R A K R T L S S S T Q A	
841/281	811/271
ACC CTG GAG ATC GAC TGT CTG TTC GAG GGC ATC GAC TTC TAC ACA TCC ATC ACC CGG GCG	
S L E I D S L F E G I D P Y T S I T R A	
901/301	871/291
CGG TTC GAA GAG CTG TGC TCG CAC CTG TTC CGC GGC ACC CTG GAG CCC GTG GAG AAC CCC	
R F E E L C S D L F R G T L E P V E K A	
961/321	931/311
CTG CGC GAC GCC AAG ATG GAC AAG GCC CAG ATC CAC GAC CTG GTG CTG GTG GGC GGC TCG	
L R D A K M D K A Q I H D L V L V G G S	
1021/341	991/331
ACG CGC ATC CCC AAG GTG CAG AAG CTG CTG CAC GAC TTC TTC AAC GGG CGC GAC CTG AAC	
T R I P K V Q K L L Q D F P N G R D L N	
1081/361	1051/351
AAG ACC ATC AAC CCG GAC GAG GCG GTG GCC TAC GGG GCG GCG GTG CAG GCG GCC ATC CTG	
F S I N P D E A V A Y G A A V Q A A I L	
1141/381	1111/371
ATG GGC GAC AAG TCG GAG AAC GTG CAG GAC CTG CTG CTG CTG GAC GTG GCG CCC	
M G D K S E N V Q D L L L L D V A P	
	1171/391

Figure 14